

I claim:

1. A solid dosage form comprising an effective amount of a tetracycline, wherein the solid dosage form rapidly disintegrates in an aqueous medium.
2. The solid dosage form of claim 1 wherein the aqueous medium is saliva.
3. The solid dosage form of claim 1 wherein the solution formed when said dosage form is placed in said aqueous medium is a mouth rinse.
4. The solid dosage form of claim 1 comprising a hard, compressed dosage form for direct oral dosing comprising  
a matrix comprising a non-direct compression filler and a lubricant,  
wherein the dosage form is adapted to rapidly dissolve in the mouth of a patient and thereby liberate the tetracycline,  
wherein the dosage form has a friability of about 2% or less when tested according to the USP friability test, and  
wherein the dosage form has a hardness of at least about 15 Newtons.
5. The solid dosage form of claim 1 wherein the solid dosage form disintegrates within two minutes when placed in an aqueous medium to form a suspension or paste which slowly releases the tetracycline.
6. The solid dosage form of claim 5 wherein the tetracycline is released over a period of ten minutes or longer.
7. The solid dosage form of claim 1 comprising a polyvalent metal ion complex of an effective amount of tetracycline.
8. The solid dosage form of claim 1 prepared by:
  - (i) preparing a suspension comprising water, a water-soluble or water dispersible carrier, and the tetracycline, a part of which is present as a suspension of solid particles;
  - (ii) forming discrete units of the suspension; and
  - (iii) removing the solvent from the discrete units,

thereby forming solid dosage forms comprising a network of carrier containing tetracycline.

9. The solid dosage form of claim 8 wherein the tetracycline is in the form of a polyvalent metal complex.

10. The solid dosage form of claim 1 comprising a hard, compressed, rapidly dissolvable dosage form for direct oral dosing comprising a matrix comprising a non-direct compression filler and a lubricant, wherein the dosage form has a friability of about 2% or less when tested according the USP friability test, and wherein the dosage form has a hardness of at least about 15 Newtons.

11. The solid dosage form of claim 10 wherein the solid dosage form disintegrates within two minutes when placed in an aqueous medium to form a suspension or paste which slowly releases the tetracycline.

12. The solid dosage form of claim 1 wherein the tetracycline is in the base form.

13. The solid dosage form of claim 1 in the form of a tablet.

14. The solid dosage form of claim 1 prepared by:

(i) preparing a solution comprising water, a water-soluble or water dispersible carrier, and the tetracycline, a part of which is present as a suspension of solid particles;

(ii) forming discrete units of the suspension; and

(iii) removing the solvent from the discrete units,

thereby forming solid dosage forms comprising a network of carrier containing tetracycline. 15. The solid dosage form of claim 1 further comprising an agent selected from the group consisting of an NSAID, an inflammatory cytokine inhibitor, a mast cell inhibitor, an MMP inhibitor, an NO inhibitor, an antifungal agent and mixtures thereof.

16. The solid dosage form of claim 1 selected from the group consisting of sugar-coated tablets, film-coated tablets, multiple compressed tablets

including layered and press coated tablets, tablets for solution, effervescent tablets, sustained release tablets, extruded tablets, frozen tablets, hard tablets, soft tablets, pills, pellets, granules, microspheres, powder and shaped powders.

17. A process for preparing a dosage form as defined by claim 1 comprising an effective amount of a tetracycline which rapidly disintegrates in an aqueous medium, comprising:

- (i) preparing a solution of a water-soluble or water dispersible carrier, a filler, and the tetracycline in the form of a polyvalent metal ion complex;
- (ii) forming discrete units of the suspension or solution; and
- (iii) removing the solvent from the discrete units whereby dosage forms are formed comprising a network of carrier/filler containing a dose of the tetracycline.

18. A method for treating or preventing oral mucositis resulting from radiation or chemotherapy for cancer comprising administering to a patient the dosage form of claim 1.